What is Claimed is:

1. An article comprising:

a shrinkable polymeric substrate; and

an electrically conductive coating disposed on at least a portion of the substrate.

2. The article of claim 1 wherein the electrically conductive coating comprises a polymeric coating including one or more electrically conductive polymers.

3. The article of claim 2 wherein at least one electrically conductive polymer comprises a moiety having $\pi$-electron delocalization.

4. The article of claim 3 wherein the moiety comprises a monocyclic aromatic hydrocarbon, a polycyclic aromatic hydrocarbon, a 5-membered aromatic heterocyclic compound, a 6-membered aromatic heterocyclic compound, or any substituted analog of any of the foregoing.

5. The article of claim 4 wherein the moiety comprises a 5-membered aromatic heterocyclic compound selected from pyrrole or thiophene.

6. The article of claim 4 wherein the moiety comprises aniline.

7. The article of claim 2 wherein the electrically conductive polymer is made from acetylene, a polyacetylene, or a substituted analog thereof.

8. The article of claim 2 wherein the polymeric coating further comprises one or more azlactone moieties.

9. The article of claim 1 wherein the electrically conductive coating is disposed on a portion of the substrate in a defined pattern.

10. The article of claim 1 wherein the electrically conductive coating provides an electrical circuit.

11. The article of claim 1 further comprising a polymeric coating comprising azlactone moieties adhered to at least a portion of the substrate.

12. The article of claim 1 wherein the polymeric substrate comprises a relaxable oriented film or a recoverable elastomeric material.

13. An array comprising:

the article of claim 1; and

one or more reactants affixed to the electrically conductive coating.

14. The array of claim 13 wherein at least one reactant is a polypeptide, a polynucleotide, a polysaccharide, or any combination thereof.

15. The array of claim 13 wherein the reactants are affixed to the electrically conductive coating to form an ordered array.

16. An article comprising:

a polymeric substrate; and

an electrically conductive coating disposed on at least a portion of the substrate and having a projected surface area and a topographical surface area wherein the topographical surface area is greater than the projected surface area.

17. The article of claim 16 wherein the electrically conductive coating comprises a polymeric coating including at least one electrically conductive polymer.

18. The article of claim 17 wherein the electrically conductive polymer comprises at least one moiety having $\pi$-electron delocalization.

19. The article of claim 18 wherein the moiety comprises a monocyclic aromatic hydrocarbon, a polycyclic aromatic hydrocarbon, a 5-membered aromatic heterocyclic compound, a 6-membered aromatic heterocyclic compound, or any substituted analog of any of the foregoing.

20. The article of claim 19 wherein the moiety comprises a 5-membered aromatic heterocyclic compound selected from pyrrole or thiophene.

21. The article of claim 19 wherein the moiety comprises aniline.

22. The article of claim 17 wherein the electrically conductive polymer is made from acetylene, a polyacetylene, or a substituted analog thereof.

23. The article of claim 17 wherein the polymeric coating further comprises one or more azlactone moieties.

24. The article of claim 16 wherein the electrically conductive coating is disposed on a portion of the substrate in a defined pattern.

25. The article of claim 16 wherein the electrically conductive coating provides an electrical circuit.

26. The article of claim 16 further comprising a polymeric coating comprising azlactone moieties adhered to at least a portion of the substrate.

27. The article of claim 16 wherein the polymeric substrate comprises a relaxed oriented film or a recovered elastomeric material.

28. An array comprising:
the article of claim 16; and

one or more reactants affixed to the electrically conductive coating.

29. The array of claim 28 wherein at least one reactant is a polypeptide, a polynucleotide, a polysaccharide, or any combination thereof.

30. The array of claim 28 wherein the reactants are affixed to the polymeric coating to form an ordered array.

31. A method of making a coated article, the method comprising:

providing a shrinkable polymeric substrate; and

coating at least a portion of the polymeric substrate with an electrically conductive coating.

32. The method of claim 31 wherein the coating step comprises:

coating the polymeric substrate with a dopant; and

permitting a monomer to contact the dopant, thereby forming the electrically conductive coating.

33. The method of claim 32 wherein the monomer is acetylene, a polyacetylene, or a substituted analog thereof.

34. The method of claim 32 wherein the monomer comprises at least one moiety having $\pi$-electron delocalization.

35. The article of claim 34 wherein the moiety comprises a monocyclic aromatic hydrocarbon, a polycyclic aromatic hydrocarbon, a 5-membered aromatic heterocyclic compound, a 6-membered aromatic heterocyclic compound, or any substituted analog of any of the foregoing.

36. The method of claim 32 wherein the monomer is provided in a monomer solution.

37. The method of claim 36 wherein the monomer solution comprises, by weight, about 20% toluene, about 70% heptane, and about 10% 5-membered aromatic heterocyclic compound.

38. The method of claim 37 wherein the 5-membered aromatic heterocyclic compound comprises pyrrole or thiophene.

39. The method of claim 36 wherein the monomer solution comprises a vapor phase and the monomer is provided in the vapor phase.

40. The method of claim 31 further comprises affixing at least one reactant to the electrically conductive coating.

41. The method of claim 40 wherein at least one reactant comprises a polypeptide, a polynucleotide, a polysaccharide, or any combination thereof.

42. The method of claim 31 wherein the electrically conductive polymeric coating comprises at least one azlactone moiety.

43. The method of claim 31 further comprising:

applying an overcoating comprising azlactone moieties to at least a portion of the article.

44. The method of claim 43 further comprising:

affixing at least one reactant to the azlactone overcoating.

45. A method of detecting an analyte in a sample, the method comprising:

providing an article comprising a shrinkable polymeric substrate and an electrically conductive polymeric coating disposed on at least a portion of the substrate;

affixing at least one reactant to the article, the reactant selected to be capable of forming a detectable interaction with the analyte;

contacting a sample including the analyte with the article, thereby permitting the analyte to form the detectable interaction with the reactant; and

detecting the detectable interaction.

46. The method of claim 45 further comprising quantifying the amount of analyte in the sample.